CLAIMS

We claim:

1. A microcontroller, comprising:

an execution unit;

a peripheral device coupled to the execution unit, the peripheral device comprising configuration registers;

a means for defining a scan path comprising the configuration registers and for communicating configuration data for the peripheral device; and

a means for saving the configuration data via the scan path.

2. A microcontroller, comprising:

an execution unit;

a peripheral device coupled to the execution unit, the peripheral device comprising configuration registers;

a means for defining a scan path comprising the configuration registers and for communicating configuration data for the peripheral device; and

a means for loading the configuration data via the scan path.

3. A method of saving configuration data for a peripheral device of a microcontroller, the method comprising the steps of:

detecting a command to save configuration data for a peripheral device of a microcontroller; and

saving the configuration data via a scan path comprising a configuration register of the peripheral device in response to the command.

4. The method of claim 3, wherein the saving step is performed prior to placing the microcontroller in a reduced power mode.

5. The method of claim 3, wherein the saving step is performed periodically.

6. The method of claim 3, wherein the configuration register comprises an internal register of the peripheral device.

7. The method of claim 3, wherein the configuration register comprises a read-only register.

8. A method of loading configuration data for a peripheral device of a microcontroller, the method comprising the steps of:

detecting a command to load configuration data for a peripheral device of a microcontroller; and

loading the configuration data via a scan path comprising a configuration register of the peripheral device in response to the command.

9. The method of claim 8, wherein the loading step occurs prior to resumption of activity by the microcontroller.

10. The method of claim 8, wherein the configuration register comprises an internal register of the peripheral device.

11. The method of claim 8, wherein the configuration register comprises a write-only register.